

INTRODUCTION

American History and the Quantitative Method

Historians deal with a universe not of absolutes but of probabilities, and for a world conceived in these terms statistics are the appropriate tool.

WILLIAM O. AYDELOTTE¹

As an humanist, I am bound to reply that almost all important questions are important precisely because they are not susceptible to quantitative answers.

ARTHUR SCHLESINGER, JR.²

IN NO PERIOD of human history have there been greater advances in science and technology than in the past twenty-five years. Physical and biological scientists have charted the course, but inevitably scholars in the social and behavioral sciences have also been swept into the vortex of the new developments. Anthropology, economics, geography, political science, psychology, and sociology all increasingly bear the marks of a mathematical method and quantification of their theories and findings. All human activity—economic, social, political, and cultural—is being subjected to mathematical analysis in the pattern of the biological sciences. For convincing evidence, one need only consult such works as John von Neumann's *The Computer and the Brain* (1958), Donald Fink's *Computers and the Human Mind* (1966), John Loehlin's

¹ William O. Aydelotte, "Notes on Historical Generalization," in Louis Gottschalk (ed.), *Generalization in the Writing of History* (Chicago, 1963), 175.

² Arthur Schlesinger, Jr., "The Humanist Looks at Empirical Social Research," *American Sociological Review*, XXVII (Dec., 1962), 770.

Books by Robert P. Swierenga

Quantification in American History:

Theory and Research (EDITOR) 1970

Pioneers and Profits: Land Speculation on the Iowa Frontier 1968

QUANTIFICATION
IN AMERICAN
HISTORY:
Theory and Research

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To my Mother and Father

Preface

QUANTIFICATION IN HISTORY is a development so recent that many are unaware of the current state of research and the potential problems and rewards of the new methodology. Indeed, few historians as yet have ventured into the seemingly dark and forbidding world of numbers and algebraic formulas. Of the nearly 300 essays submitted to the *Journal of American History* in 1969 for consideration for publication, fewer than 3 per cent, according to the editor, "employed quantification to substantiate their conclusions."¹

The primary aim of this anthology is to stimulate interest among historians in the quantitative work being done in American history. The book offers a selection of seminal articles that examine the theoretical implications and practical applications of statistical and computer-aided techniques in the field of American history. All of these studies were written by scholars within the last decade and most have appeared in professional journals. The book is designed for historiography and historical methods courses. It illustrates the wide variety of quantitative techniques adopted by pioneering historians in the areas of content analysis, legislative and judicial behavior, popular voting analysis, economic history, and socio-cultural developments. The time span of the articles ranges from the colonial period to the twentieth century.

Two things this book does not attempt are to teach quantitative methods and to disparage traditional approaches to history. To master correlation and regression techniques, factor analysis, scaling, and significance tests, one must turn to other sources. Methodological explanations are frequently included in the various articles, but these are merely designed to make the method intelligible to the general reader. Secondly, the book does not try to persuade historians to desert traditional methods for new ones. There are many doors to historical

¹ The comment is in the annual report of the editor, Martin Ridge, to the Board of Editors for the year 1968–1969, *Journal of American History*, LVI (Sept., 1969), 462. This is the same ratio of quantitative articles that the editor received the previous year, 1967–1968, the first time this statistic was reported (*ibid.*, LV [Sept., 1968], 468).

truth and a healthy discipline is one in which various viewpoints and methods complement one another.

Several debts were incurred in preparing this volume. My colleagues at Kent State University, August Meier and John T. Hubbell, gave unstintingly of their time to offer technical and editorial advice. The Kent State University Library extended many courtesies, especially in the Interlibrary Loan department. I am grateful to the editorial staff of Atheneum Publishers for many valuable suggestions and trenchant criticism which greatly strengthened the finished product. Finally, I am indebted to my wife, Joan, for advice and encouragement and her assistance as a typist.

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